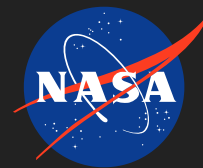# A Community-Driven Workflow Recommendation and Reuse Infrastructure

Completed Technology Project (2012 - 2015)

Project Introduction

Promote and encourage process and workflow reuse within NASA Earth eXchange (NEX) by developing a proactive recommendation technology based on collective NEX user behaviors.
Leverage social network analysis to intelligently extract hidden knowledge from a shared computing platform
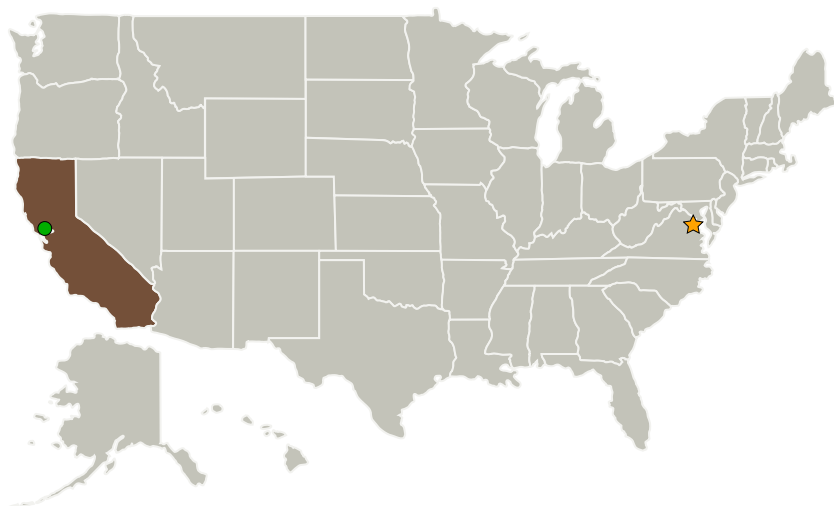Extend our understanding of Earth science workflow interoperability and composition
Provide a recommend-as-you-go workflow development environment
Allow Earth science community to make more effective use of computational resources
Enable more virtual collaboration through workflow reuse

Primary U.S. Work Locations and Key Partners

Project Image A Community-Driven Workflow Recommendation and Reuse Infrastructure

Table of Contents

Organizations Performing Work	Role	Type	Location
⭐NASA Headquarters(HQ)	Lead Organization	NASA Center	Washington, District of Columbia
🟢Ames Research Center(ARC)	Supporting Organization	NASA Center	Moffett Field, California
Carnegie Mellon University - Silicon Valley	Supporting Organization	Academia	Moffett Field, California

Primary U.S. Work Locations
California

Images

11837-1363097059162.png
Project Image A Community-Driven Workflow Recommendation and Reuse Infrastructure
(https://techport.nasa.gov/image/1696)

Organizational Responsibility

Responsible Mission Directorate:
Science Mission Directorate (SMD)

Lead Center / Facility:
NASA Headquarters (HQ)

Responsible Program:
Earth Science
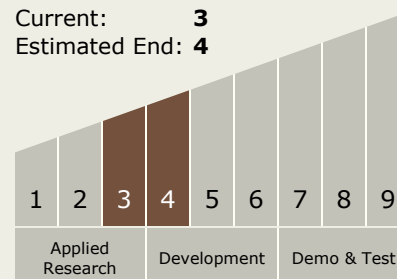
Project Management

Program Director:
George J Komar

Principal Investigator:
Jia Zhang

Technology Maturity (TRL)

Start: **3**
Current: **3**
Estimated End: **4**

1	2	3	4	5	6	7	8	9
Applied Research			Development			Demo & Test		

Technology Areas

Primary:

Continued on following page.

Technology Areas
(cont.)

- TX11 Software, Modeling, Simulation, and Information Processing
  └ TX11.4 Information Processing
    └ TX11.4.2 Intelligent Data Understanding

Target Destination
Earth